

61. (New) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises a decreased fasting insulin level.
62. (New) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises an increased glucagon level.
63. (New) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises decreased body weight.
64. (New) The transgenic mouse of claim 57, wherein the pancreatic abnormality is selected from the group consisting of pancreatic hyperplasia, pancreatic hypertrophy, increased cytoplasmic vacuolization of pancreatic cells, and increased cytoplasmic granularity of pancreatic cells.
65. (New) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises a pancreatic adenoma.
66. (New) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises an increase in number and size of pancreatic alpha cells.
67. (New) The transgenic mouse of claim 57, wherein the pancreatic abnormality comprises a decrease in number of pancreatic beta cells.
68. (New) The transgenic mouse of claim 57, wherein the metabolic abnormality is selected from the group consisting of decreased body fat percentage, decreased body weight and decreased organ weight.
69. (New) The transgenic mouse of claim 57, wherein the metabolic abnormality comprises decreased body size or dwarfism.
70. (New) A transgenic mouse whose genome comprises a homozygous disruption in an endogenous glucagon receptor gene, wherein where the transgenic mouse is mated with an opposite gender transgenic mouse whose genome comprises a homozygous disruption in an endogenous glucagon receptor gene, the transgenic mouse exhibits, relative to a wild-type mouse, reduced fertility.
71. (New) A cell obtained from the transgenic mouse of claim 57.

In the Specification:

Please replace the paragraph beginning at page 59, line 9, continuing to page 60, line 6, with the following paragraph: